

REMARKS

1. In response to the Office Action mailed June 19, 2007, Applicants respectfully request reconsideration. Claims 1-6, 8-17, 20, 21, 24-26 and 28-62 have been rejected. By the foregoing amendments, claims 1, 2, 8-11, 17, 24, 29, 33, 34, 40, 41, 48, 59, 61 and 62 have been amended. No claims have been cancelled. Two new claims (claims 63 and 64) have been added. No new matter has been added. Thus, upon entry of this paper, claims 1-6, 8-17, 20-21, 24-26, 28-64 will be pending in this application. Of these fifty-eight (58) claims, five (5) claims (claims 1, 24, 29, 59 and 63) are independent.

2. Based on the above amendments and following Remarks, Applicants respectfully request that all outstanding objections and rejections be reconsidered, and that they be withdrawn.

Art of Record

3. Applicants acknowledge receipt of form PTO-892 listing an additional reference identified by the Examiner.

4. Applicants thank the Examiner for returning form PTO-1449 filed by Applicants on December 14, 2006, which has been initialed by the Examiner indicating that the Examiner has considered the references cited therein.

Examiner's Interview

5. Applicants thank Examiner Stoklosa and Primary Examiner Evanisko for the courtesy extended in the telephonic interview conducted on September 17, 2007. In the Interview the Examiner accepted that U.S. Patent No. 6,119,044 to Kuzma does not teach a "conical tapered tip member" as is recited in the independent claims 1, 24, 29 and 59.

Claim Rejections – 35 USC § 112

6. Claim 61 has been rejected under 35 U.S.C. § 112, first paragraph, as failing to comply with the written description requirement. Claim 61 has been amended to overcome this rejection. Applicants therefore request that the rejection be reconsidered and that it be withdrawn.

Claim Rejections – 35 USC § 102

7. Independent claims 1, 24, 29, 59 dependent claims 2-3, 7, 8, 14-20, 27, 28, 30, 32-35, 39, 45-49, 60-62 have been rejected under 35 U.S.C. §102(b) as being unpatentable over U.S. Patent No. 6,119,044 to Kuzma (hereinafter, “Kuzma”). Based on the above Amendments and following Remarks, Applicants respectfully request that these rejections be reconsidered and withdrawn.

8. Independent claims 1, 24 and 29, as amended, recites an elongate carrier member and a “conical tapered tip member” extending distally from a distal end of said elongate carrier member. (*See*, Applicants’ amended claims 1, 24, and 29, above.) Independent claims 59, as amended, recites an elongate carrier member and a “tip member... wherein the diameter of said tip member continuously decreases from about 0.45 mm at a proximal end to about 0.2 mm at said distal end” and extending distally from a distal end of said elongate carrier member. (*See*, Applicants’ amended claim 59, above.)

9. Kuzma describes an implantable electrode array adapted to be inserted into the cochlea and to assume a shape so as to hug the modiolar wall of the cochlea after insertion. A naturally curved positioning stylet made of shape-memory metal is cooled into a straight shape and inserted into the electrode array. As the stylet warms to body temperature, it returns to its spiral memory shape, causing the electrode array to also assume a spiral shape, thus positioning the electrode contacts against the modiolar wall. (*See*, Kuzma, Abstract.) FIG. 4 of Kuzma shows an electrode array which was formerly straight (shown as broken lines) but is now in a curved configuration. Kuzma further states that “soft tip 37, having a depth of distance L8, is typically formed from LSR-25 at the very distal tip of the electrode array 30. In the preferred embodiment, L8 has a value of approximately 0.3 mm.” (*See*, Kuzma, col. 11, ll. 39-42.) As acknowledged by the Examiner during the telephonic interview, tip 37 of Kuzma appears to be hemispherical and not a “conical tapered tip member” as recited in Applicants’ amended independent claims. For at least this reason alone, Applicants respectfully request that the rejections of these claims be reconsidered, and that they be withdrawn.

10. Furthermore, in the Interview the Examiner asserted that the soft tip 37 of Kuzma cannot bend and, as such, anticipates the recitations in Applicants' claims of the "tip member prevents substantial foldover of said tip member when a deflection/impact force is applied to said tip member during implantation into the cochlea" as recited in Applicants' independent claims. Although Applicants disagree. The carrier member of Kuzma attains its conical shape due to the increase in temperature of the device, not from being forced into a curved orientation by contact with the cochlea wall. As such, it is unreasonable to speculate that soft tip 37 is sufficiently rigid to avoid foldover when Kuzma fails to provide a need or desire for doing so. However, to facilitate prosecution, Applicants have amended certain of the independent claims to recite dimension of the carrier member tip to distinguish Applicants' claimed invention from a similar region of the Kuzma carrier. Also, Applicants respectfully assert that absent Applicants' disclosure, it would not have been obvious to a person of ordinary skill in the art to modify Kuzma to have a "conical tapered tip member" or a "tip member... wherein the diameter of said tip member continuously decreases from about 0.45 mm at a proximal end to about 0.2 mm at said distal end" as recited in Applicants' independent claims 1, 24, 29 and 59.

11. As stated in Applicants' specification, previous designs providing an extended flexible tip for a lead to aid in the insertion process have focused on better flexibility rather than stability of the tip during insertion, hence suffering the same problem of foldover by the electrode array during insertion. (See, Application, pg. 9, ¶ 9.) The same is true of Kuzma. In Kuzma, wire bundles 202 and 203 are embedded within the molded carrier 36 and are located immediately behind and along opposing edges of the exposed surface of the electrodes, resulting in additional stiffness in the lateral direction, "thereby making it more difficult to bend or twist the array in the lateral direction. In contrast the array remains relatively easy to bend in the medial direction." (See, Kuzma, col. 12, ll. 43-63.) In other words, by having wire bundles close to one surface of the electrode array (medial surface), Kuzma's states that its design made the electrode array harder to bend in the lateral direction while making it *easier to bend or twist in the medial direction*. It seems clear that Kuzma considers the improved flexibility of its design to be a beneficial feature. Kuzma too, therefore, is focused on providing an electrode array design which is focused on better flexibility of the electrode array, rather than in providing a tip that

prevents foldover (less flexible and less easy to bend) during insertion. Therefore, without Applicants' disclosure as a blueprint for finding the claimed features, a person of ordinary skill in the art would not have been motivated to make the tip structure of Kuzma less easy to bend.

Claim Rejections – 35 USC § 103

12. Dependent claims 5, 6, 12, 13, 37, 38, 43 and 44 have been rejected under 35 U.S.C. §103(a) as being unpatentable over Kuzma. These dependent claims incorporate all of the subject matter of their respective independent claims and add additional subject matter, which makes them *a fortiori* independently patentable over the art of record. Accordingly, Applicants respectfully request that the outstanding rejections of the dependent claims be reconsidered and withdrawn.

Conclusion

13. In view of the foregoing, this application should be in condition for allowance. A notice to this effect is respectfully requested.

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Respectfully submitted,

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